## IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with <u>strikethrough</u>. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claim 2 and AMEND claims 1, 3, and 8, in accordance with the following:

1. (**CURRENTLY AMENDED**) A solid-state polymer electrolyte membrane comprisingeharacterized in:

that a primary constituent of a poly (bis(oligo-ethylene glycol) benzoate) which is a hyperbranched polymer having an acidic functional group disposed at a terminal of a side chain thereof and having an oligo-ethylene oxide structure at a backbone chain thereof. expressed by general formula 1 below,

...(general formula 1),

wherein R is a terminal acidic functional group, m is a number from 1 to 6, and \* is a connection point of a subsequent bis(oligo-ethylene glycol) benzoate primary constituent.

- 2. (CANCELLED)
- 3. (**CURRENTLY AMENDED**) A solid-state polymer electrolyte membrane according to claim 1-or-claim-2, whereincharacterized in:

that the poly (bis(oligo-ethylene glycol) benzoate) is a polymer having a dendritic structure, which is obtained by polymerizing an  $A_2B$ -type monomer synthesized from an oligoethylene oxide chain expressed by  $(CH_2CH_2O)_m$  (m = 1 to 6) and dioxybenzoate.

4. (**WITHDRAWN**) A solid-state polymer electrolyte membrane, characterized in:

that a primary constituent of which is a mixture of the hyperbranched polymer having an acidic functional group disposed at a terminal of the side chain thereof and a bridged polymer having a network structure.

5. (**WITHDRAWN**) A method for manufacturing a solid-state polymer electrolyte membrane, comprising:

a first step in which poly (bis(oligo-ethylene glycol) benzoate) is synthesized by polymerizing an A2B-type monomer synthesized from an oligo-ethylene oxide chain expressed by  $(CH_2CH_2O)_m$  (m = 1 to 6) and dioxybenzoate; and

a second step in which an acidic functional group is introduced at a terminal of a side chain of the poly (bis(oligo-ethylene glycol) benzoate).

6. (WITHDRAWN) A method for manufacturing a solid-state polymer electrolyte membrane according to claim 5, characterized in:

that in the second step, the acidic functional group is introduced at the terminal of the side chain by first esterifying the terminal of the side chain with alkaline metallic salt of an o-, m- or p-sulfobenzoic acid or a disulfobenzoic acid.

7. **(WITHDRAWN)** A method for manufacturing a solid-state polymer electrolyte membrane according to claim 5, characterized in:

that in the second step the acidic functional group is introduced the terminal of the side chain by first esterifying the terminal of the side chain with a benzoic acid compound having as a functional group thereof phosphoric acid or phosphonic acid ester and converting the terminal of the side chain to an acidic functional group through hydrolysis of phosphoric acid ester or phosphonic acid ester obtained by the first esterifying.

8. (CURRENTLY AMENDED) A solid-state polymer electrolyte fuel cell, comprising a solid-state polymer electrolyte membrane according to any of claims 1 orthrough 34.